



State Revolving Fund Loan Programs Drinking Water, Wastewater, Nonpoint Source

PRELIMINARY DECISION OF CATEGORICAL EXCLUSION

TO ALL INTERESTED CITIZENS, ORGANIZATIONS AND GOVERNMENT AGENCIES:

CITY OF JEFFERSONVILLE
Tenth Street Pump Station Expansion and New Force Main
SRF # WW06 12 10 05

Date: February 1, 2011

Target Project Approval Date: February 2, 2011

Pursuant to IC 4-4-11, the State Revolving Fund (SRF) Loan Program has determined that the project described here and in the City of Jeffersonville's Preliminary Engineering Report submitted to the SRF on October 22, 2010 will have no substantial negative environmental impact. Therefore, the SRF is issuing a preliminary decision of Categorical Exclusion from the requirements of substantive environmental review.

How were environmental issues considered?

The National Environmental Policy Act (NEPA) requires agencies disbursing Federal funds to include environmental factors in the decision making process. A summary of the project is attached for your review. The SRF's preliminary review has found that the proposed project does not require the preparation of either an EA or an EIS.

Why is additional environmental review not required?

Our environmental review has concluded that significant environmental impacts will not result from the proposed action.

How do I submit comments?

Comments can be submitted to:

Max Henschen, Senior Environmental Manager
SRF Programs
317-232-8623; mhensche at ifa.in.gov

CATEGORICAL EXCLUSION

I. PROJECT IDENTIFICATION

Project Name and Address: **Tenth Street Pump Station Expansion
and new Force Main**
City of Jeffersonville
Jeffersonville City Hall
500 Quartermaster Court
Jeffersonville, IN 47130

SRF Project Number: WW06 12 10 05

Authorized Representative: The Honorable Thomas R. Galligan, Mayor

II. PROJECT LOCATION

Jeffersonville is located in Clark County across the Ohio River from Louisville, Kentucky. The project area includes (1) the Tenth Street Pump Station (TSPS) on the north side of Tenth Street, approximately 400 feet west of the intersection of Spring Street and Tenth Street, and (2) the proposed force main route from the TSPS to the Downtown Wastewater Treatment Plant (DWWTP). The TSPS is in the Jeffersonville, IN-KY USGS quadrangle in Survey No. 1 of the Illinois Grant for Clark County in Jeffersonville civil township. The proposed force main is also in the Jeffersonville, IN-KY USGS quadrangle, in Survey Nos. 1 and 8 (Figure 1).

III. PROJECT NEED AND PURPOSE

The city owns and operates a sanitary sewer system, storm water system, and combined sewer system (i.e., sewers which carry both storm water and sanitary wastewater). The Combined Sewer Service Area comprises approximately 15 percent of the city's current service area; the remainder is comprised of separate sanitary sewers and storm sewers.

The combined sewers were constructed in the early 1900s in the old downtown area of the city. Sanitary sewers were not constructed until after 1950. The combined sewers range in size from 12- to 96-inches in diameter and are comprised of brick, vitrified clay pipe and reinforced concrete pipe. There are three major lift stations: the Tenth Street Pump Station, Spring Street Pump Station, and the Mill Creek Pump Station; there are 48 minor or secondary pumping stations.

The DWWTP receives flows directly from the three primary pump stations and one industrial facility (Kruncher's). The TSPS is the primary contributor and the only pump station that serves the combined sewer system.

The city entered into a Consent Decree with the U.S. EPA and the Indiana Department of Environmental Management (IDEM), effective on November 24, 2009, which specifies the methods and time frames which the city must follow in order to reduce or eliminate combined sewer overflows (CSOs) to the Ohio River; CSO 018 discharges from the TSPS in heavy rains.

The city's Combined Sewer Overflow Long Term Control Plan (CSO LTCP) identifies several projects that will enable the collection system to route more wet weather flows to an upgraded DWWTP. The Consent Decree stipulates that the TSPS should be upgraded to handle a minimum capacity of 35 million gallons per day (MGD); the city will upgrade the TSPS to treat a peak flow of 50 MGD. The Consent Decree also stipulates that the DWWTP should be upgraded to treat a peak flow of 50 MGD; currently the DWWTP can treat a peak flow of 34 MGD. The city is pursuing the DWWTP upgrade project separately.

The TSPS and DWWTP capacity increases are designed to reduce discharges from CSO 018 at the TSPS to three or less during a typical year. When the TSPS and DWWTP projects are finished, CSO 018 will discharge only after the DWWTP has treated a peak flow of 50 MGS for at least three consecutive hours.

The TSPS screens will also be replaced, since they can remove only large debris. There are no grit removal facilities, causing excess grit buildup in the wet well and reducing storage volume. The excess volume of grit in the wet well also has caused excessive wear on the pumps, force main and the process components at the DWWTP.

The proposed TSPS expansion project includes the installation of five submersible pumps rated at 10 MGD each giving it a firm capacity of 40 MGD, with the ability to achieve a peak hourly flow of approximately 50 MGD. The project also includes installing approximately 4,130 feet of 36-inch diameter force main, as well as a new grit removal and pre-screening facility (see Figure 2).

Three force main route alternatives were evaluated including the "No Action" alternative.

The **"No Action" alternative** was rejected since a new force main would be required as part of the TSPS expansion, which is part of the city's Consent Decree and CSOLTCP.

The **"Route B Alternative"** proposes a new force main route parallel to the existing 24-inch and 30-inch diameter force main route, but this alternative was rejected due to higher operation and maintenance cost.

The **"Route A Alternative"** proposes the same route as Route B from the TSPS in a northeasterly direction along an abandoned railroad right-of-way; when it reaches the 12th and Locust Streets intersection, it will continue northeast along the south side of 12th Street before crossing over to the B&O railroad right-of-way until it reaches Champion Road, where it will turn toward the DWWTP and proceed to the eastside of the headworks structure. **Based on a cost-effectiveness analysis, this force main route was the selected alternative** (see Figure 3).

Three force main sizing alternatives were evaluated including the "No Action" alternative.

The **"No Action" alternative** was rejected for the same reason described above for the force main route alternatives, due to the city's Consent Decree with the USEPA and IDEM.

The **"Construction of a 48-Inch Force Main"** alternative proposes replacing the 18-inch and 24-inch force mains with a new 48-inch force main, but this alternative was rejected due to high cost.

The **"Construction of a New 36-Inch Force Main Coupled with the Existing 24-Inch Force Main"** alternative proposes abandoning the existing 18-inch force main, using the existing 24-inch force main serving two pumps in the east wet well compartment at the TSPS and constructing a new 36-inch force main that would serve three pumps in the west wet well compartment. A new 42-inch header pipe would also be constructed within the valve pit to accept flows from both wet well compartments followed by a flow control valve that will allow normal flows through the new 36-inch force main and open the 24-inch force main during wet weather/high flow events. **Based on a cost effectiveness analysis, this was the selected alternative.**

IV. ESTIMATED PROJECT COST AND FUNDING

Selected Plan Estimated Cost Summary

<u>Construction Components</u>	<u>Costs</u>
Mobilization & Demobilization	\$ 100,000
36-inch HDPE force main (~4, 130 ft)	1,560,025
5 TSPS pumps 10 MGD ea, electrical work, flow meters, building modifications, bypass pumping, traffic control, piping, valves, fittings, etc.	4,340,000
Screens, grit removal system, grit classifier, and site works	<u>2,496,125</u>
Subtotal Estimated Construction Cost	\$ 8,496,150
Contingencies	<u>851,364</u>
Total Estimated Construction Cost	\$ 9,347,514
Non-Construction Costs*	1,592,052
Land Acquisition **	<u>17,500</u>
Total Estimated Project Cost	\$10,957,066

* includes administrative, legal, engineering & inspection costs

** land acquisition is not eligible for funding in SRF

The city will borrow approximately \$10,939,566 through a 20-year State Revolving Fund Loan Program (SRF) loan at an interest rate to be determined at loan closing. Land acquisition (\$17,500) will be paid with local funds. Monthly user rates and charges may need to be analyzed to determine if adjustments are required for loan repayment.

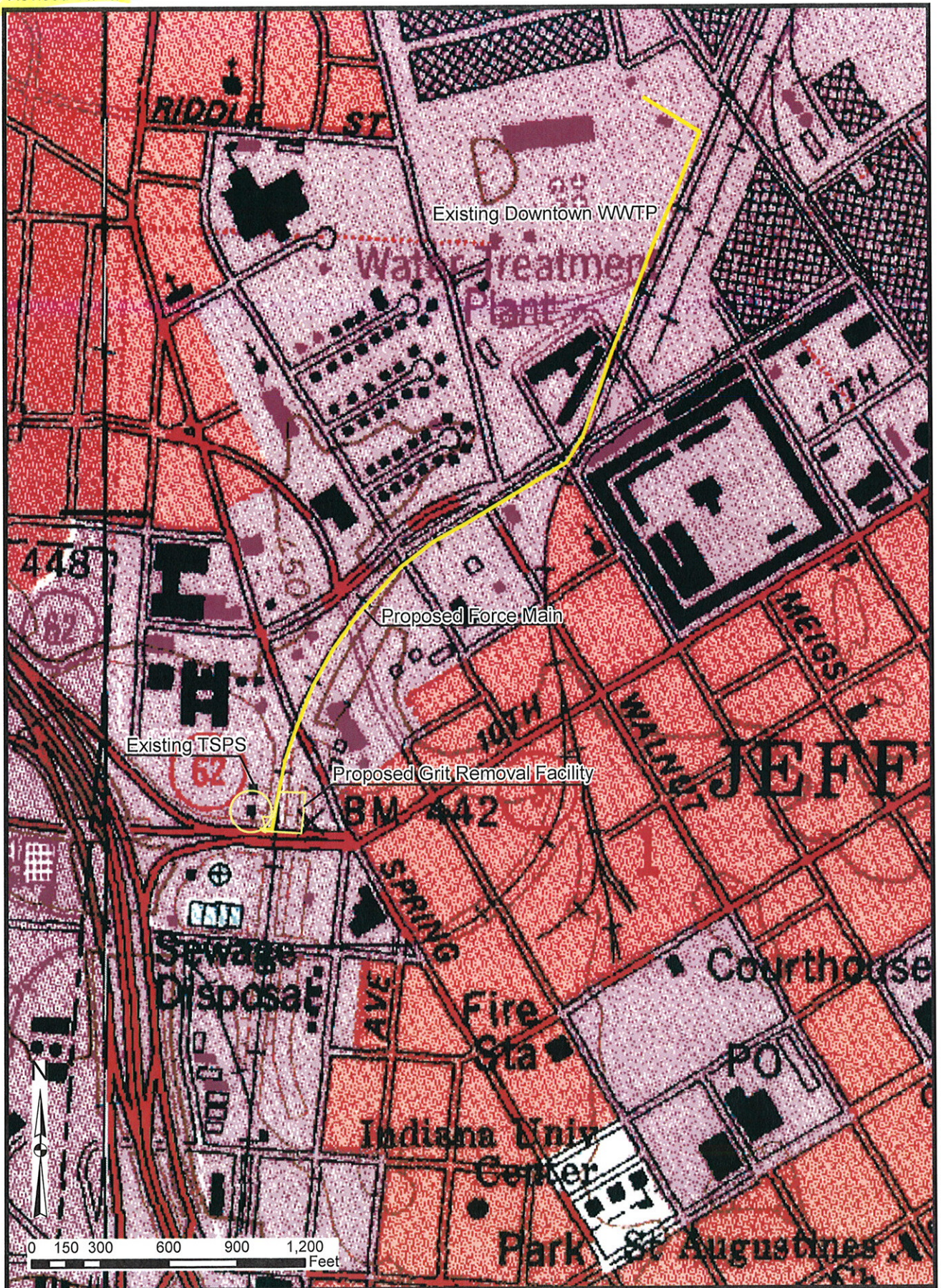
V. ENVIRONMENTAL IMPACTS OF THE FEASIBLE ALTERNATIVES

The project will not affect areas not previously disturbed by previous construction activity. The proposed 36-inch force main will follow an abandoned railroad corridor from the TSPS site to 12th Street and will parallel an active railroad corridor between 12th Street and Champion Road. The force main route will then continue along the Champion Road right-of-way until it reaches the DWWTP site. The projects will not affect endangered species or their habitat, National Natural Landmarks, streams, wetlands or the 100-year floodplain (Figure 3).

The Train Depot at 1030 Spring St. is a Notable historic site (#019-305-61007), according to the Clark County Interim Report; the project will not affect that site. The force main will be near the Quartermaster Depot Historic District, but will not affect that District. Construction and operation of the project will not alter, demolish or remove historic properties (see Figure 4). If any visual or audible impacts to historic properties occur, they will be temporary and will not alter the characteristics that qualify such properties for inclusion in or eligibility for the National Register of Historic Places. The SRF's finding pursuant to Section 106 of the Historic Preservation Act is: "no historic properties affected"

VI. PUBLIC PARTICIPATION

A properly publicized public hearing was held at 7:30 p.m. on Tuesday March 24, 2009, in the Mayor's Conference Room in City Hall. Members of the public did not attend.



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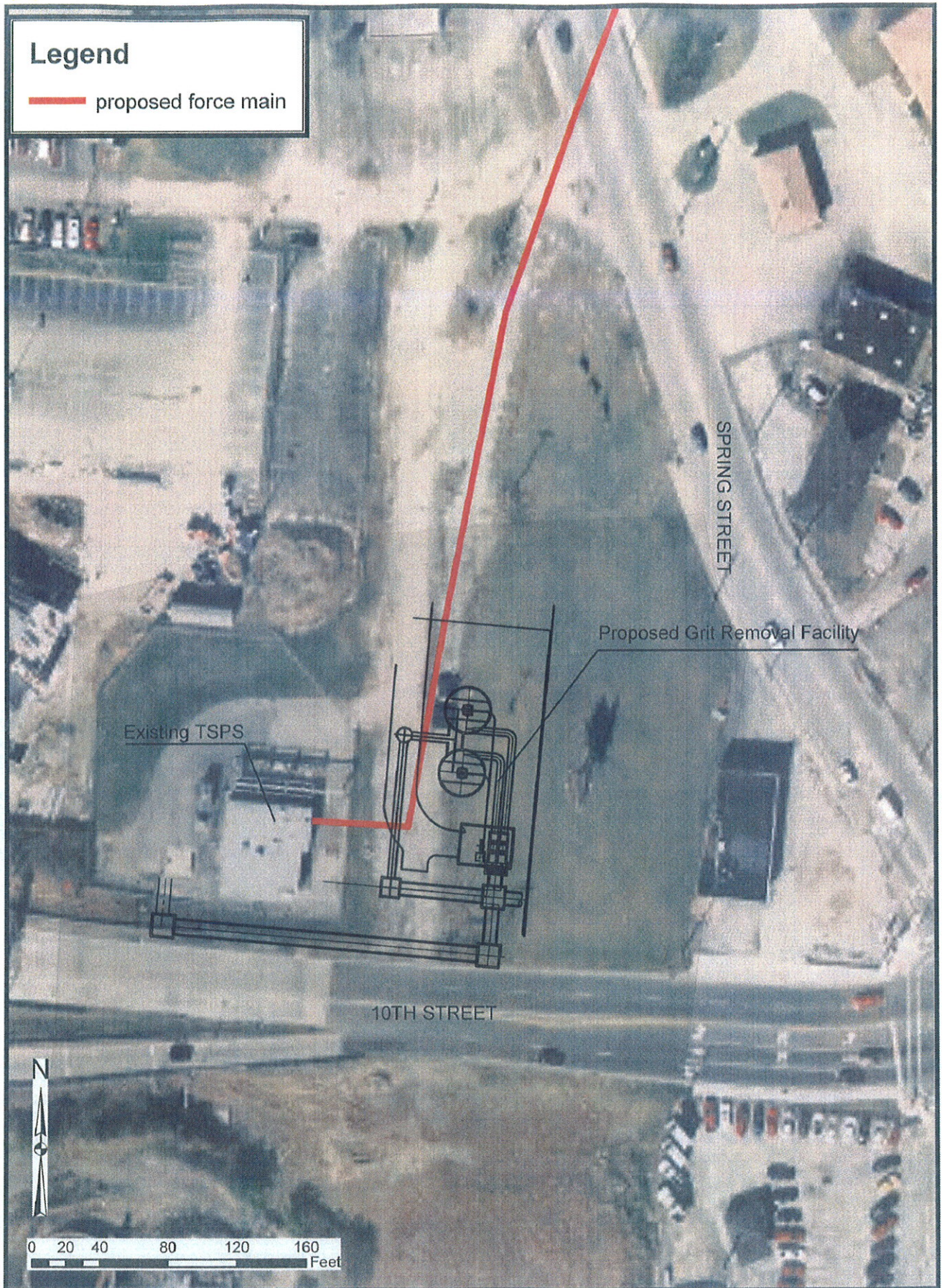
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USGS MAP & PROPOSED IMPROVEMENTS

**TENTH STREET PUMP STATION
 JEFFERSONVILLE, CLARK COUNTY**

FIGURE

1



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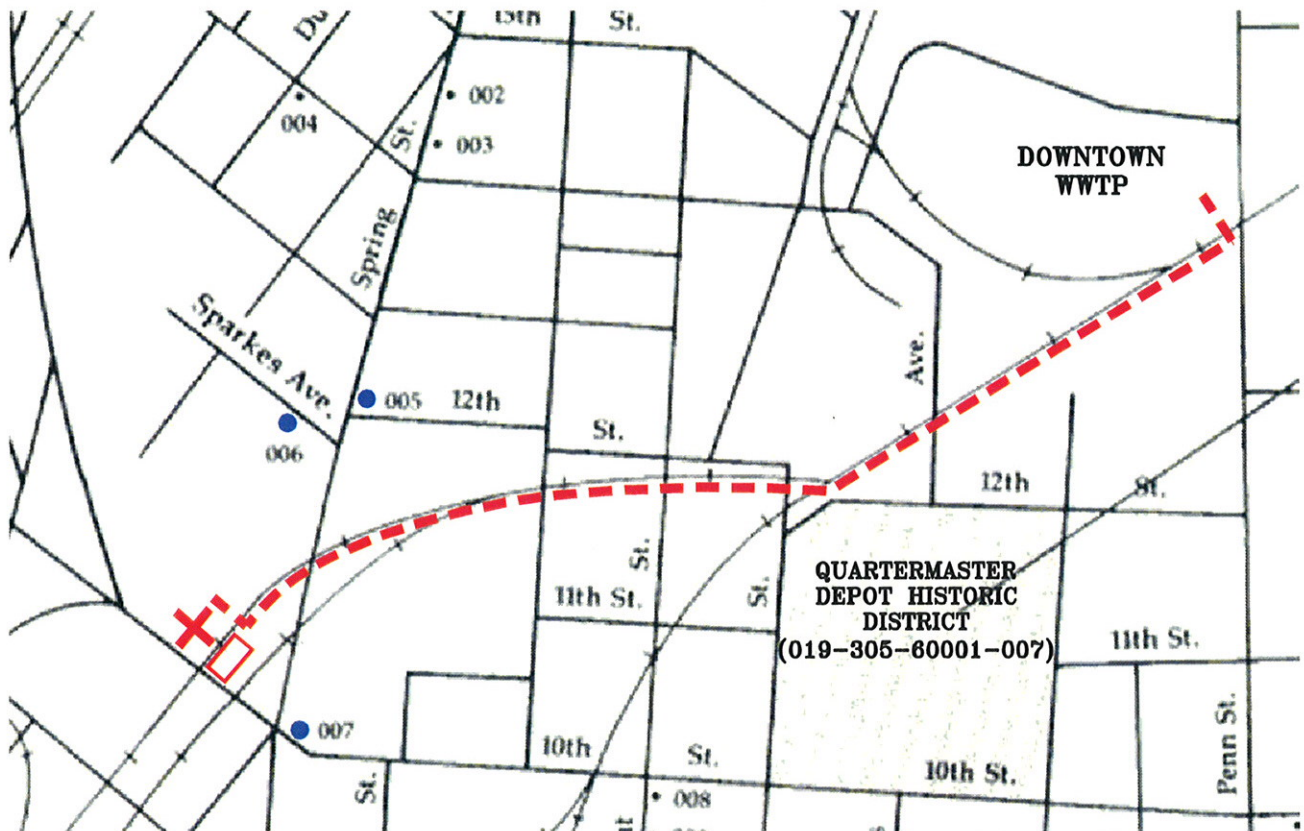
PROPOSED GRIT REMOVAL FACILITY

**TENTH STREET PUMP STATION
JEFFERSONVILLE, CLARK COUNTY**

FIGURE

2

FROM JEFFERSONVILLE SCATTERED SITES (61001-164)



BASE MAP FOUND IN THE CLARK CO. INTERIM REPORT PUBLISHED BY THE HISTORIC LANDMARKS FOUNDATION OF INDIANA (PG. 83)

LEGEND

- | | | | |
|--|---|--|---|
| | EXISTING LIFT STATION | | 005 C HOUSE, 1206 SPRING ST; FREE CLASSIC, c.1890; ARCHITECTURE (305) |
| | NEW PRE-SCREENING & GRIT REMOVAL FACILITY | | 006 C HOUSE, 105 SPARKES AVE; FREE CLASSIC, c.1900; ARCHITECTURE (305) |
| | PROPOSED FORCE MAIN | | 007 C TRAIN DEPOT, 1030 SPRING ST; TWENTIETH CENTURY FUNCTIONAL, c.1920; ARCHITECTURE, TRANSPORTATION (305) |



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HISTORIC LANDMARKS FOUNDATION MAP
TENTH STREET PUMP STATION EXPANSION
CITY OF JEFFERSONVILLE

FIGURE
3



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100-YEAR FLOODPLAIN & WETLAND MAP

TENTH STREET PUMP STATION
 JEFFERSONVILLE, CLARK COUNTY

FIGURE

4